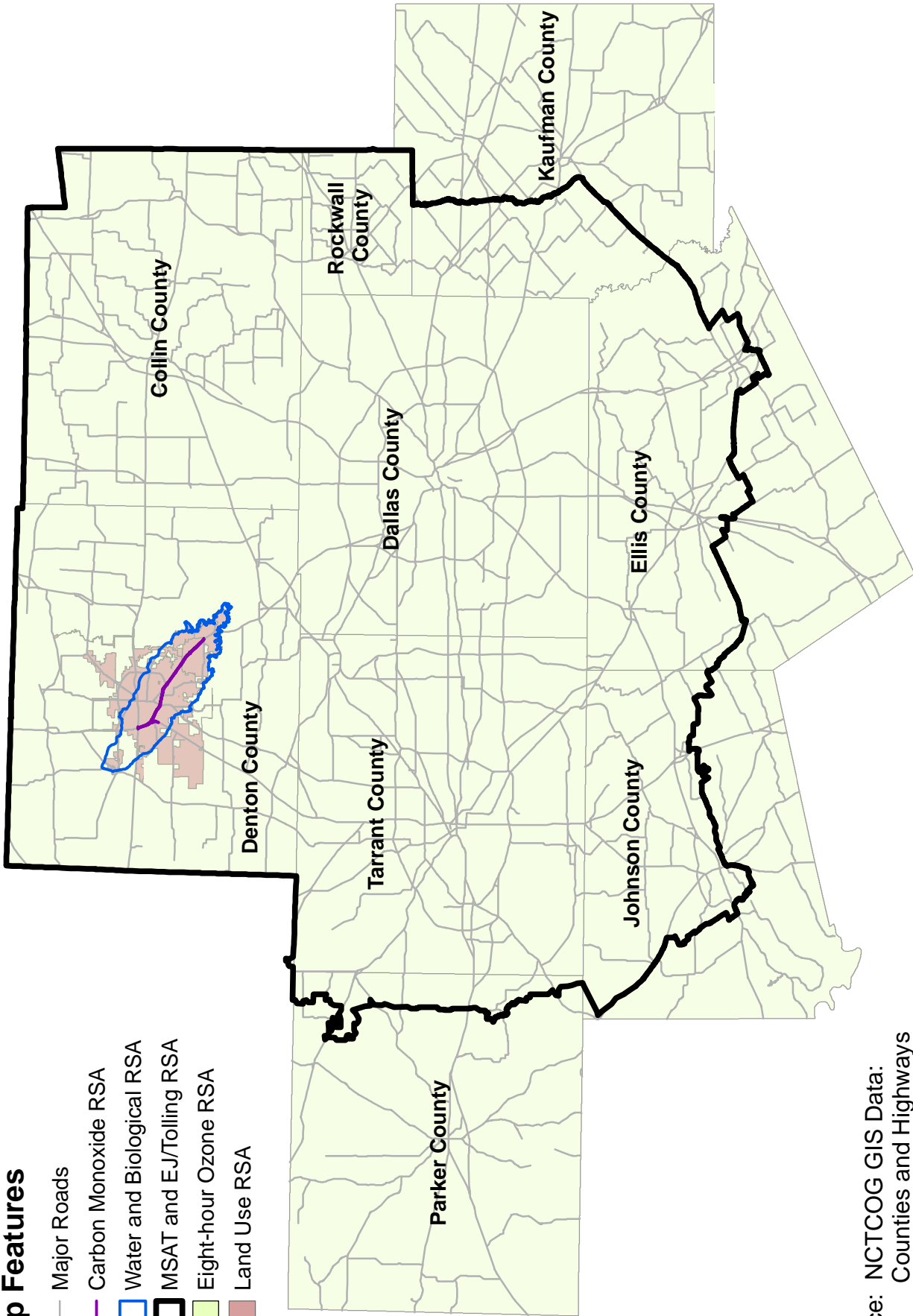


**APPENDIX E
CUMULATIVE IMPACTS**

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Figure E-2	Cumulative Impacts Reference Map
Appendix E-3	Reasonably Foreseeable Actions in the Resource Study Area for Water/Biological Resources

Map Features

- Major Roads
- Carbon Monoxide RSA
- Water and Biological RSA
- MSAT and EJ/Tolling RSA
- Eight-hour Ozone RSA
- Land Use RSA

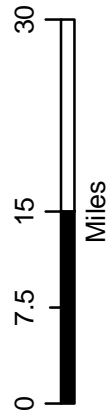


Source: NCTCOG GIS Data:
Counties and Highways

Figure E-1

**Resource Study Areas (RSA)
for the Cumulative Impacts Analysis**

IH 35E from FM 2181 to US 380, Denton County, Texas



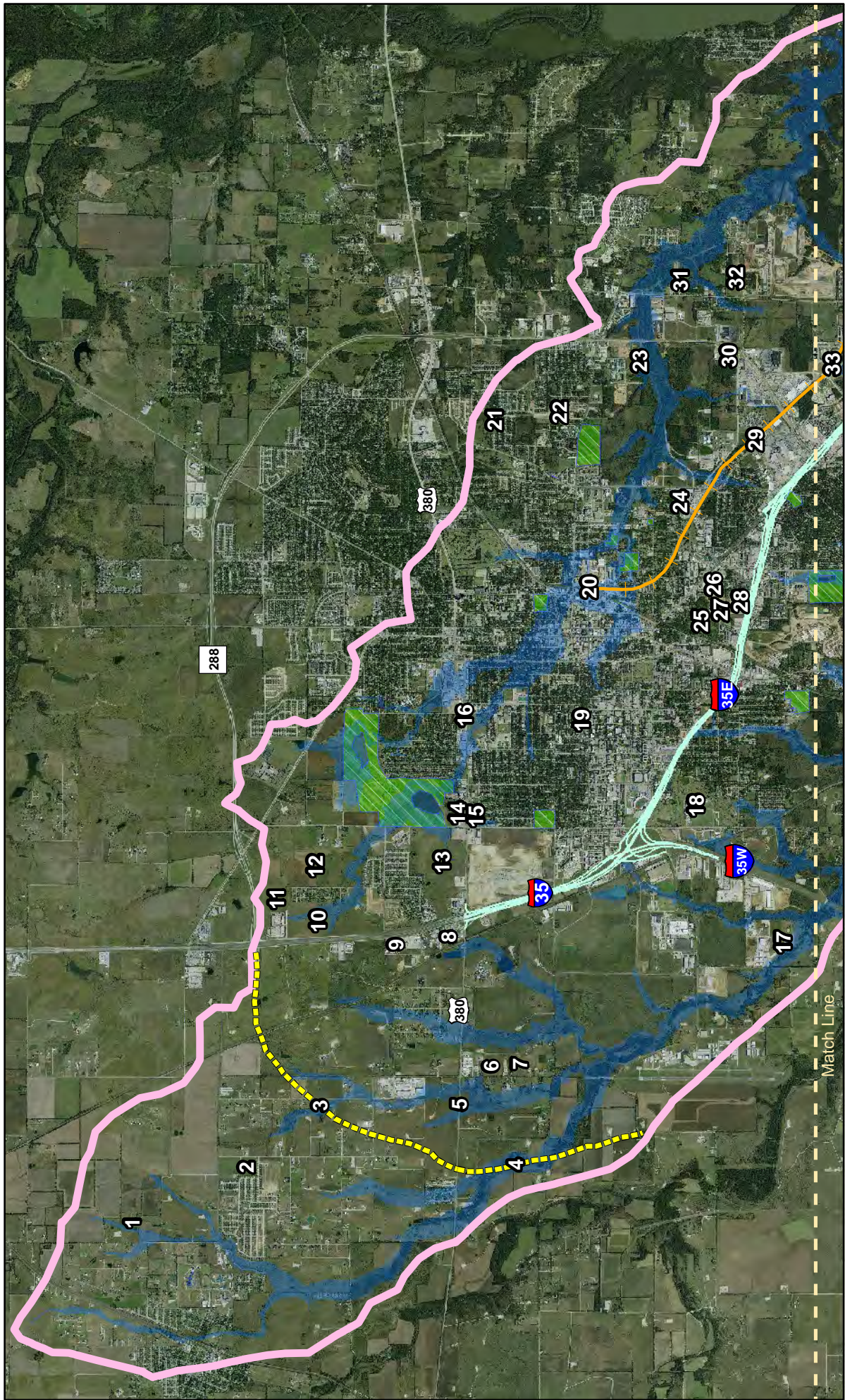
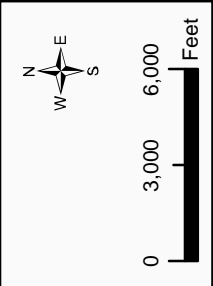


Figure E-2 (Sheet 1 of 2)
Cumulative Impacts Reference Map
 IH 35E from FM 2181 to US 380
 Denton County, Texas
 Source/Year of Aerial Photograph: Landiscor/2007



Legend

- Biological and Water Resources RSA
- Floodplain
- Parks
- Proposed IH 35E North Section
- Proposed New Roadway
- DCTA A-train Rail Line
- Ongoing/Planned Development or Transportation Project (see Appendix E-3)

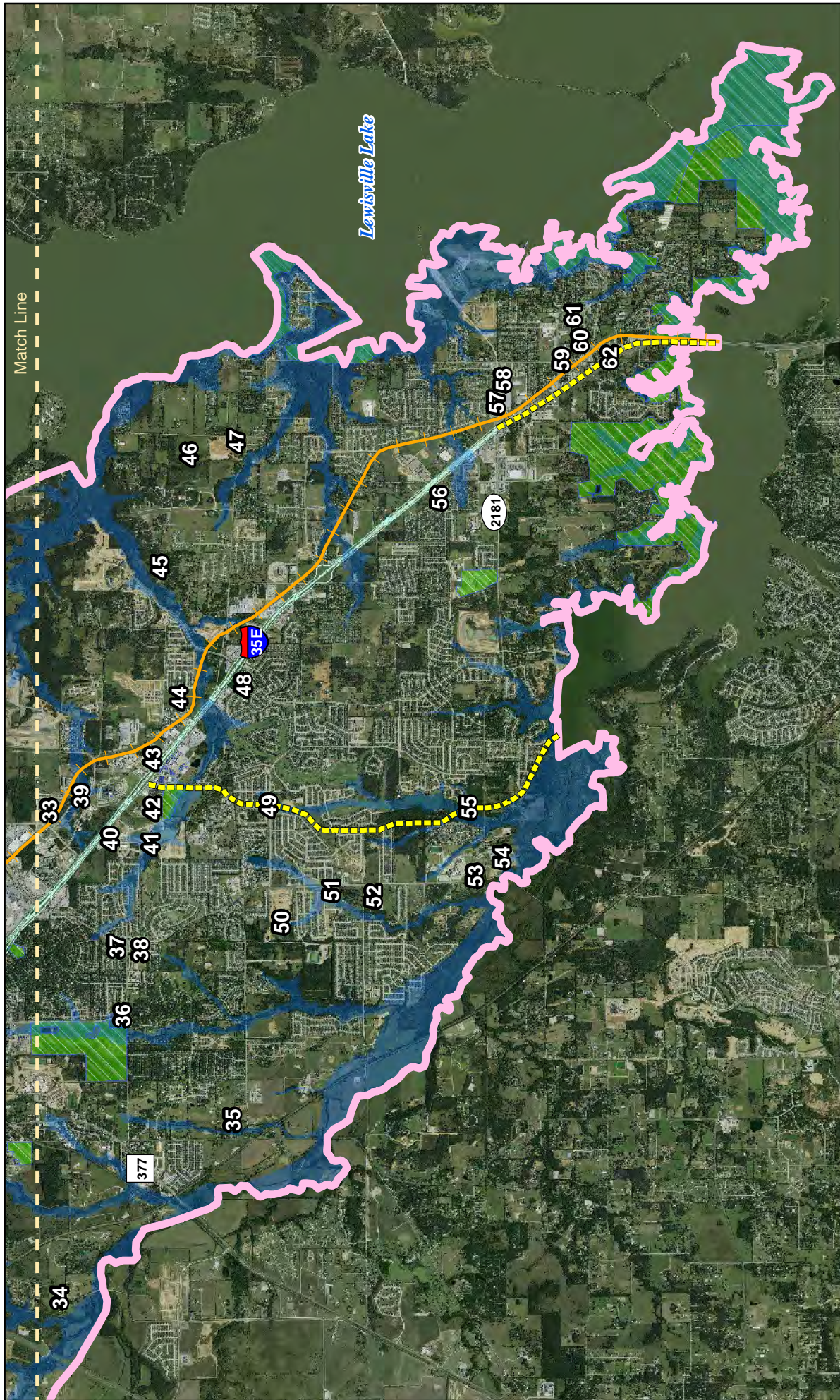
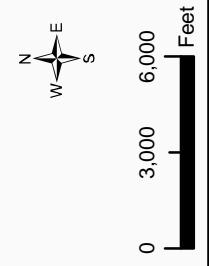


Figure E-2 (Sheet 2 of 2)
Cumulative Impacts Reference Map
 IH 35E from FM 2181 to US 380
 Denton County, Texas
 Source/Year of Aerial Photograph: Landiscor/2007



- Legend**
- Biological and Water Resources RSA
 - Floodplain
 - Parks
 - Proposed IH 35E North Section
 - Proposed New Roadway
 - DCTA A-train Rail Line
 - Ongoing/Planned Development or Transportation Project (see Appendix E-3)

APPENDIX E-3. REASONABLY FORESEEABLE ACTIONS IN THE RESOURCE STUDY AREA FOR WATER/BIOLOGICAL RESOURCES

Map ID¹	Future Action	Description	Acreage Affected	Resource Impact Notes² Units = acres
1	Aspen Park	A residential development of 131 single-family homes located immediately east of Hopkins Road and north of FM 1173 in Krum.	39.0	Grassland: 38.3 Stream: 0.2 Open water: 0.5
2	Krum Estate Villas	A 140 unit apartment complex development located south of 1173 and north of Santa Fe Road on Masch Branch Road in Krum.	11.4	Grassland: 9.9 Urban surface: 1.5
3	Loop 288 NW – Phase I	Proposed transportation project involving the construction of a 2-lane rural roadway on new location from IH 35E southward to US 380.	36.3	Grassland: 34.5 Upland forest: 0.7 Urban surface: 1.1
4	Loop 288 NW – Phase II	Proposed transportation project involving the construction of a 2-lane rural roadway on new location from US 380 southward to IH 35W (project partially located within RSA).	20.4	Grassland: 18.4 Upland forest: 1.6 Urban surface: 0.4
5	US 380	Proposed transportation project to widen the existing 2-lane roadway to a 6-lane divided urban thoroughfare from Thomas J Egan Rd. eastward to IH 35E.	20.8	Grassland: 18.4 Upland forest: 1.8 Urban surface: 0.2 Open water: 0.4
6	Yorum Addition	An industrial development located immediately east of North Masch Branch Road, to the south of US 380 in Denton.	14.8	Grassland: 14.8
7	Titus Addition	An industrial development located immediately east of North Masch Branch Road, to the north of Jim Christal Road in Denton.	18.2	Grassland: 18.2
8	Rinker Addition	A commercial/multi-family development located at the northeast corner of Bandera Street and Mesa Drive in Denton.	2.0	Urban surface: 2.0
9	La Quinta	A hotel development located near the southwest corner of Schuyler Street and the IH 35 southbound frontage road in Denton.	4.4	Riparian Forest: 4.4
10	Valplace Denton	A commercial/industrial development located at the southwest corner of Schuyler Street and the IH 35E southbound frontage road in Denton.	2.6	Urban surface: 2.6
11	Galatyn Park	A mixed-use development located at the southeast corner of IH 35 and Westgate Street in Denton.	94.5	Grassland: 92.8 Urban surface: 0.9 Stream: 0.8
12	Galatyn Park II	A mixed-used development located east of IH 35 and immediately south of North Loop 288 (north of Galatyn Park) in Denton.	35.2	Grassland: 35.1 Stream: 0.1
13	Kings Ridge	A single-family residential development located south of North Loop 288 and immediately west of North Bonnie Brae Street in Denton.	230.6	Grassland: 198.5 Upland forest: 10.0 Riparian forest: 16.2 Urban surface: 3.4 Stream: 1.5 Open water: 1.0

APPENDIX E-3. REASONABLY FORESEEABLE ACTIONS IN THE RESOURCE STUDY AREA FOR WATER/BIOLOGICAL RESOURCES

Map ID¹	Future Action	Description	Acreage Affected	Resource Impact Notes² Units = acres
14	Rayzor Ranch North	A mixed-use development located at the northwest corner of US 380 and North Bonnie Brae Street in Denton.	152.0	Grassland: 137.2 Urban surface: 13.6 Stream: 1.2
15	Rayzor Ranch South	A mixed-use development located at the southeast corner of US 380 and IH 35 in Denton.	30.0	Urban surface: 30
16	Bill Utter Site	A commercial development located at the northeast corner of N Bonnie Brae Street and US 380 in Denton.	14.7	Grassland: 6.8 Urban surface: 7.9
17	Unnamed Commercial Site	A commercial development located at the northeast corner of N Bonnie Brae Street and Emery Street, south of US 380 in Denton.	8.1	Grassland: 8.1
18	US 380	Proposed transportation project to widen the existing 4-lane divided roadway to a 6-lane divided urban thoroughfare from US 77 eastward to Loop 288 (project partially located within RSA).	0.0	No additional impacts to resources; construction is anticipated to occur within existing transportation ROW.
19	Corbin Road Industrial Park	An industrial development located at the northeast corner of Corbin Road and Spring Side Road in Denton.	51.1	Riparian Forest: 2.9 Urban surface: 47.9 Stream: 0.3
20	Granite Point Business Park III	The third commercial building associated with the Granite Point Business Park, located near the southwest corner of Metro Street and IH 35W in Denton.	8.0	Urban Surface: 8.0
21	UNT	Expansion of the UNT Eagle Point Campus, located south of IH 35E and the UNT main campus in Denton. Expansion includes the construction of a new football stadium, football practice fields, recreation fields, a track and field facility, pavilion, future housing, and improvement of a greenway.	150.7	Grassland: 81.6 Urban surface: 68.6 Stream: 0.5
22	Denton Convention Hotel	A hotel development with convention facilities located on the site of the former Radisson Hotel, near the southwest corner of North Texas Boulevard and IH 35E (across IH 35E from UNT) in Denton.	5.5	Urban Surface: 5.5
23	Fry Street Village	A commercial development located at the northeast corner of West Hickory Street and Fry Street in Denton.	3.9	Urban surface: 3.9
24	RailDCTA Downtown Denton Station	Proposed construction of a RailDCTA station located at the RailDCTA project terminus; between Hickory and Sycamore street (north to south) and Bell and Railroad avenues (west to east) in Denton; Site encompasses approximately 10 acres.	0.0	No impacts are anticipated; the site is currently owned by the City of Denton and will be shared with the RailDCTA station.
25	Audra Oaks	A single-family residential development located south of Audra Lane, to the west off Nottingham Drive and east of Mockingbird Lane in Denton.	11.3	Grassland: 10.6 Urban surface: 0.7

APPENDIX E-3. REASONABLY FORESEEABLE ACTIONS IN THE RESOURCE STUDY AREA FOR WATER/BIOLOGICAL RESOURCES

Map ID¹	Future Action	Description	Acreage Affected	Resource Impact Notes² Units = acres
26	Maple Leaf Homes	A single-family residential development located north of FM 426/E McKinney Street and south of Paisley Street, immediately to the west of Bellaire Drive in Denton.	26.8	Urban surface: 26.8
27	Park 288	A commercial development located at the northeast and southeast corner of South Loop 288 and Duchess Drive in Denton.	49.5	Grassland: 36.7 Upland forest: 0.4 Riparian forest: 12.0 Stream: 0.4
28	Shady Oaks	A commercial development located north of Shady Oaks Drive in between Kerley Street to the east and South Woodrow Lane to the west in Denton.	2.1	Grassland: 2.1
29	Denton Station/Centre Place	A commercial/multi-family development located north of Inman Street and spanning from near South Locust Street to the west to Sombra Vista Drive to the east in Denton.	26.9	Grassland: 10.9 Upland forest: 8.8 Urban surface: 7.2
30	Denton Station/Centre Place	A commercial development located north of IH 35E and west of Centre Place Drive, just as it curves and turns into Alegre Vista Drive in Denton.	11.8	Grassland: 11.4 Urban surface: 0.4
31	Centre Place	A mixed-use development located at the west corner of IH 35E and Centre Place Drive in Denton.	9.2	Grassland: 5.3 Urban surface: 3.4 Open water: 0.5
32	Cypress Campus	A multi-family residential development located west of Centre Place Drive and at the end of Inman Street, immediately north of the Centre Place development in Denton.	9.7	Grassland: 3.3 Urban surface: 6.1 Open water: 0.3
33	RailDCTA A-train	Proposed construction of a 21-mile regional Rail line from North Carrollton northward to Downtown Denton.	0.0	No additional impacts to resources; construction is anticipated to occur within the existing ROW of the Missouri-Kansas-Texas (MKT) Railroad line.
34	Spencer Square	A commercial development located at the northwest corner of Spencer Road and South Loop 288 in Denton.	14.3	Grassland: 0.2 Upland forest: 14.1
35	Mayhill Road Addition	An industrial development located immediately to the east of Mayhill Road, south of Morse Street in Denton.	5.3	Grassland: 4.3 Urban surface: 1.0
36	Solid Waste Complex, Site 1	An industrial development located at the merge of Spence Road and Treatment Plant Road, south of Treatment Plant Road in Denton.	3.2	Grassland: 1.2 Urban surface: 1.6 Open water: 0.4
37	North Star Shopping Center	A commercial development located at the southwest corner of Spencer Road and Mayhill Road in Denton.	16.6	Grassland: 14.6 Riparian Forest: 1.0 Open Water: 1.0
38	Signature Senior Living	A medical/assisted living center located at the southeast corner of Brinker Road and Quail Creek Drive in Denton.	6.9	Grassland: 6.9
39	Don Barber Addition	A residential development located at the northeast corner of South Bonnie Brae Street and Brown Bothers Trail in	1.7	Grassland: 1.7

APPENDIX E-3. REASONABLY FORESEEABLE ACTIONS IN THE RESOURCE STUDY AREA FOR WATER/BIOLOGICAL RESOURCES

Map ID¹	Future Action	Description	Acreage Affected	Resource Impact Notes² Units = acres
		Denton.		
40	Ryan Road Estates	A single-family residential development located at the northwest corner of P.R. 0501 and West Ryan Road, just east of Country Club Road in Denton.	10.3	Grassland: 10.3
41	Trinity Addition	An institutional development located at the northwest corner of East Hobson Lane and Teasley Lane in Denton.	4.0	Grassland: 4.0
42	Hunter Ridge	A medical office located at the northwest corner of Wind River Lane and Lillian Miller Parkway in Denton.	3.4	Grassland: 3.2 Urban surface: 0.2
43	Teasley Commons	A commercial development located west of Teasley Lane and south of Wind River Lane in Denton.	5.8	Urban surface: 5.8
44	RailDCTA South Denton/Medpark Station	Proposed construction of a RailDCTA station located in south Denton at Brinker Rd. near the Denton Regional Medical Center.	15.5	Urban surface: 15.3 Stream: 0.1 Open water: 0.1
45	Denton Commons	A commercial development located at the northwest corner of the IH 35E southbound frontage road and Unicorn Lake Boulevard in Denton.	4.1	Grassland: 4.1
46	Unicorn Lake	A mixed-use, commercial development to the north, east, and west of Unicorn Lake in Denton.	88.5	Grassland: 0.1 Urban surface: 85.0 Stream: 0.1 Wetland: 3.3
47	Unicorn Lake	A mixed-use, residential development located to the east of Unicorn Lake in Denton.	70.8	Grassland: 12.1 Urban surface: 58.7
48	Mayhill Denton Addition	A commercial development located at the northwest corner of Pockrus Page Road and the MKT railroad ROW in Denton.	18.9	Urban surface: 18.9
49	Village of Carmel	A commercial development located immediately south of Pockrus Page Road and west of Cattail Lane in Denton.	22.9	Grassland: 21.8 Urban surface: 1.1
50	Preserve at Pecan Creek, Subareas H & I	A single-family residential development located east of Meadowlark Lane and east of West Hidden Valley Road in Denton.	34.4	Upland forest: 30.5 Riparian forest: 3.0 Urban surface: 0.1 Stream: 0.2 Open water: 0.6
51	Adkisson Ranch	A residential development of 59 single-family residential homes located west of Garza Road, south of Smokey Lane and north of West 6 th Street in Shady Shores.	64.5	Grassland: 42.3 Upland forest: 19.8 Urban surface: 2.4
52	Town of Shady Shores Middle School	A middle school located at the northwest corner of Shady Shores Road and Garza Lane in Shady Shores.	9.6	Grassland: 4.9 Urban surface: 4.7
53	FM 2499 Section 5	Proposed transportation project involving the construction of a 6-lane divided urban thoroughfare from FM 2181 northward to IH 35E.	45.4	Grassland: 26.9 Upland forest: 12.8 Urban surface: 4.6 Open water: 0.5

APPENDIX E-3. REASONABLY FORESEEABLE ACTIONS IN THE RESOURCE STUDY AREA FOR WATER/BIOLOGICAL RESOURCES

Map ID¹	Future Action	Description	Acreage Affected	Resource Impact Notes² Units = acres
				Wetland: 0.6
54	Forest Meadows	A single-family residential development located at the southwest corner of Teasley Lane and Robinson Road in Denton.	78.7	Grassland: 27.0 Upland forest: 11.6 Urban surface: 39.3 Stream: 0.4 Open water: 0.4
55	Lexington Park	A medical office located at the northwest corner of Teasley Lane and Nowlin Road in Denton.	1.7	Grassland: 1.7
56	Salvo Center	A commercial development located at the southwest corner of Teasley Lane and Hickory Creek Road in Denton.	16.8	Grassland: 16.5 Open water: 0.3
57	Corinth South Substation	An electric substation located at the northwest corner of Teasley Lane and Old Alton Road in Denton.	5.8	Grassland: 5.8
58	Denton Creek Estates	A single-family residential development located at the southeast corner of Teasley Lane and Old Alton Road in Denton.	9.7	Urban surface: 9.7
59	FM 2499 Section 4	Transportation project involving the construction of a 4-lane divided urban arterial on new location from FM 407 northward to FM 2181 (project partially located within RSA).	18.1	Grassland: 4.1 Upland forest: 14.0
60	The Children's Courtyard	A childcare facility located west of IH 35E and south of Meadowview Drive in Corinth.	3.6	Grassland: 0.9 Upland forest: 0.6 Urban surface: 2.1
61	QuickTrip Convenience Store	A retail development located at the southeast corner of Swisher Road. And Denton Drive in Lake Dallas.	2.4	Grassland: 1.5 Urban surface: 0.9
62	Video Plus Office Building	A commercial development located south of Swisher Road approximately .25 mile between Denton Drive and Shady Shores Road in Lake Dallas.	3.4	Urban surface: 3.4
63	Office Building	A commercial development located at the corner of Denton Drive and Shady Shores Road in Lake Dallas.	0.8	Grassland: 0.3 Upland forest: 0.3 Urban surface: 0.2
64	Office/Apartment Building	A mixed-use development located at the northwest corner of Main Street and Gotcher Avenue in Lake Dallas.	0.6	Grassland: 0.2 Urban surface: 0.4
65	City of Lake Dallas Elementary School	An elementary school located north of Main Street and west of Goliad Avenue in Lake Dallas.	18.6	Grassland: 1.6 Upland forest: 2.1 Urban surface: 14.7 Stream: 0.2
66	IH 35E Middle Section	Proposed transportation project to reconstruct IH 35E from 5 mainlanes with 1-2 reversible managed lanes to 4 mainlanes with 2 concurrent managed lanes, stretching from PGBT northward to FM 2181 (project partially located within RSA).	39.6	Grassland: 23.8 Upland forest: 11.9 Urban surface: 3.9

**APPENDIX E-3. REASONABLY FORESEEABLE ACTIONS IN THE RESOURCE
STUDY AREA FOR WATER/BIOLOGICAL RESOURCES**

Map ID ¹	Future Action	Description	Acreage Affected	Resource Impact Notes ² Units = acres
TOTAL/SUMMARY			1747.4	Grassland: 1,034.9 Upland forest: 141.0 Riparian forest: 39.5 Urban surface (Developed/Disturbed): 516.1 Stream: 6.0 Open water: 6.0 Wetland: 3.9
Note: 1. Map ID refers to the identification letter used in Appendix E-2, Sheets 1 and 2 to show the general location of the proposed action. 2. All acreages are approximate and are based on a description of each proposed action, interviews with city planners, and examination of 2007 high-resolution aerial photography.				